

May 24, 2001

Jim,

Please find below the changes that I would like you to make to your original power point presentation. I have numbered the slides according to the order that they appeared in the presentation that you sent to me on disk. When you have made the changes please send the revised presentation to me on e-mail and on a disk. I'd like to have the e-mail and disk when I return to the office on Monday, June 4. Please remove the Ch2M Hill logo from the slides. I am indifferent to the "background" that you use on the slides. Just don't do anything too flashy! Thanks for your assistance.

Slide 1 (title slide) - Change the title to "Bunker Hill Mine Water Management Remedial Investigation/Feasibility Study and Remedy Selection Process."

Slide 2 (Bunker Hill location) - Replace this slide with Figure 2-1 from the RI/FS.

Slide 3 (mine history) - Replace as follows:

#### Mine History

- 1885 - Ore discovered
- 1981 - Mineral processing and smelting ceased
- 1991 - Mine closed
- 1991 - Bankruptcy of BHMC and BLP
- 1992 - Mine purchased by NBHMC
- 1992 - Non-Populated Area ROD
- 1994 - Bankruptcy of Gulf and Pintlar
- Late 1994 - EPA take over treatment facility
- 1995 - Fund financed remedial actions start
- 1998 - RI/FS for mine water management

Slide 4 - (RI/FS figure 2-3) - Keep as is.

Slide 5 - (mine cross section) - Eliminate this slide.

Slide 6 - (generalized flow model)- Keep as is.

Slides 7 - 10 (mine entrance to average metal loads) - Keep as is.

Slide 11 (historical mine water management) - Eliminate this slide.

Slide 12 (problem summary) - Add a first bullet which says "AMD Expected to Discharge Indefinitely." Change bullet that says "Does Not Meet Water Quality Criteria" to "Does Not Meet Water Quality Standards or TMDL." Remove last bullet which says "High Cost (long-term)".



Insert the following three slides here (summary of risk) before slide 13 (remedial action objectives)

1. Contaminants of Concern

Priority Pollutants

Arsenic	Cadmium
Copper	Lead
Mercury	Zinc
Silver	Selenium
Thallium	

Non-Priority Pollutants

Aluminum  
Iron  
Manganese

2. Exposure Assessment

Humans, aquatic life and terrestrial wildlife

Untreated AMD

Exposure potential at Kellogg Tunnel, Lined Pond, Bunker Creek

Treated AMD

Exposure potential at CTP, Bunker Creek

Treatment Plant Sludge

Exposure potential at sludge pond

3. Include Table 2-3 from the RI/FS

Slide 13 (remedial action objective) - Change bullet that says "Achieve water quality criteria" to "Achieve water quality standards and TMDL."

Slides 14 - 16 (less mine water to less sludge) - Keep as is.

Slides 17 and 18 (\$\$ Effective to RI/FS process Objectives) - Eliminate these slides.

Slide 19 (RI/FS Approach) - Remove "(Presumptive Remedy)."

Slides 20 and 21 (remedy components to presumptive remedy process) - Eliminate these slides.

Slides 22 - 28 (developed conceptual model to evaluated treatment options)- Keep as is.

Slides 29, 30, and 31 (developed four sludge management options to mitigation effectiveness) - Eliminate these slides.

Insert - Insert table 3-3 from the RI/FS (remedy components) here before slide 32 (alternatives).

Slides 33 - 35 (threshold, balancing, and modifying criteria) - Combine these into one slide.

Slides 36 - 41 (overall protection of human health to implementability criteria) - Keep as is.

Slide 42 (cost) - Replace with table 5-9 of the RI/FS (summary of costs).

Slides 43 - 46 (30 year NPV to Kellogg tunnel) - Eliminate these slides.

Insert - Preferred Alternative

Alternative 3 and Sludge Disposal Option A

- Most promising AMD mitigations measures
- Combines in-mine and surface AMD storage
- Upgrades to treatment plant
- Sludge disposal contingencies